

ABSTRACT OF THE DISCLOSURE

A low-water cut-off system [A] determines if fluid [W]
5 within a boiler or other enclosure drops below a predetermined
level within the enclosure. A signal generator introduces a
signal into the enclosure so that the signal is present for
sensing at the predetermined level, where a probe is provided
for sensing the signal if present as occurs if the water is at
10 the predetermined level. A control, which includes a
microcontroller, is responsive to the probe for providing a
control function in response to whether the signal is so sensed
by the probe, and so to determine if water has dropped below the
predetermined level. The function may be causing alarm
15 signalling or boiler heating cut-off. Self-test and time delay
features are also included. Provision is made so that the
control compensates for variation in electrical conductivity of
the water through which the probe signal is sent, including
circuitry to adjust for a wide range of possible purity levels.
20 Provision is included such that the low water cut-off system is
fault tolerant no matter at what water purity it is adjusted to
operate.